

COPPER ABOUNDS.

An Extraordinary Growth of Our National Output.

BULK OF THE WORLD'S SUPPLY.

More Than Half a Billion Pounds per Annum Mined in the United States. Increasing Consumption.

Copper is the American metal par excellence. We shall mine 600,000,000 pounds of it in 1901, and will sell to foreign consumers over 1,000,000 pounds per day. In fact, we produce considerably more than one of the world's total supply of copper.

Copper mining has a very picturesque interest for more reasons than one. In point of beauty the metal is hardly surpassed even by gold, rivaling the latter in the brilliancy of its yellow glitter when new and unoxidized. So far as usefulness goes, iron is its only superior, and within the last few years there has been an enormous increase in its production, owing chiefly to the development of electrical industries. Immense quantities of copper are required by the telegraph, telephone and the electric railway, as well as for wires used in the transmission of electric power.

The great boom in copper production came at the end of the eighties, when there was much speculation in the metal, and since then the increased price has led to an eager seeking for fresh deposits. There has been a feverish development of new mines in various parts of the world, but, notwithstanding the anxiety of the search, no great properties have been discovered. Improved processes have made it possible to extract the copper profitably from very low grade ore, some of them containing as little as one half of one percent, and it is mainly to this cause that the wonderful growth of the out may be attributed.

MUST BUY COPPER REE.

Though we are by far the largest users of the metal, we are able, while supplying our own wants, to export immense quantities. In fact, we sell to foreign purchasers as much as we utilize ourselves. Great Britain, France and Germany taking pretty nearly all of the copper ingots and plates that we send abroad. Those countries—excepting Germany, which has only a small output—are not producers of copper, and so they are obliged to buy from us the enormous quantities of the stuff which they require in their businesses.

During the year 1900 we sold to foreign consumers about 381,000,000 pounds of copper. Full statistics for that twelfth month have not yet been gathered by the output of the United States Geological Survey, but the output of this country in 1899 was 567,500,000 pounds. In the same year the rest of North America contributed 95,594,000 pounds; South America yielded 73,315,000 pounds, Europe sent to market 294,075,000 pounds, Asia furnished 61,730,000 pounds, Australia supplied 40,096,000 pounds, and Africa added for her share 14,537,000 and the output of the entire world being thus somewhat over one billion pounds of the metal.

The bulk of the copper output of this country comes from three states—Michigan, Montana and Arizona. The mines of the Lake Superior region, which up to 20 years ago, furnished four-fifths of our total yield of the metal, are most picturesque interesting, not only because they produce the stuff in a pure state, ready refined by nature, but also on account of their history. They were worked by the Indians for centuries before the coming of Columbus, and the copper from this source was distributed all over the eastern part of the United States through that wonderful system of barter and exchange which had been established among the aborigines, extending from the Great Lakes to the Gulf of Mexico and from the Mississippi river to the Atlantic Ocean.

MASSIVE DIFFICULT TO MINE.

The Jesuit priests who first explored the southern shores of Lake Superior found huge masses of pure copper, which naturally excited their astonishment, inasmuch as the metal is not found in such shape anywhere else in the world. Early aboriginal miners found it impracticable to deal with these great lumps, because of the difficulty of cutting them to pieces, and modern operators, provided with machinery and every facility that capital and enterprise could furnish, have had much the same trouble. Indeed, the mining of this mass copper, so attractive to the eye and stimulating to the imagination, has proved very hazardous and often unprofitable to investors.

There is, however, plenty of copper to be found in quite another form in the Lake Superior region. It occurs in a kind of conglomerate rock, which though low grade ore, is dealt with in enormous quantities and yields great profits. Some of the deepest mining in the world is done in this conglomerate, and special machinery for quick hoisting has been devised, in order that as much as possible of the ore may be fetched to the surface in the shortest time. Instead of steel hammers depending on gravity for the force of the blows with which they pound the rock, steam stamps of tremendous power are employed, smashing the ore to powder. When the powdered rock is washed away, the copper remains in the shape of tiny flat plates, which are melted into ingots.

The discovery of copper in Montana was made by J. B. Haggis, a young man who came to the state poor, and opened up a silver mine. After a while the silver "played out," though both silver and gold are still obtained with the copper, a rich vein of which was found below. The Montana copper is a sulphide—that is to say, a combination of copper and sulphur. To get the metal, the sulphur is roasted out of it, and this used to be done by piling the ore in a long heap and lighting a fire at one end of it.

COPPER IN ARIZONA.

Now in Arizona copper is found in still another shape—that is to say, in the form of a carbonate. The ores are very beautiful, some of them being green malachite and others blue azurite. Occasionally in these deposits nuggets of pure metallic silver are found as big as one's hand. Being so interesting as curiosities, these nuggets have usually been preserved.

Most of the azurite and malachite in the old mines have been worked out and the diggings have got down to sulphides, which are treated like those of Montana.

The output for 1900 was not far from 1,100,000,000 pounds, and during that year the production of the United States will be as much as the aggregate yield of the world ten years ago. In 1850 we produced less than 1,500,000 pounds of copper, and in 1860 our output was only a little more than 16,000,000 pounds—less than our production for two weeks at the present time. For the entire nineteenth century the world's yield of the metal is estimated to have been about 20,000,000,000 pounds.

The copper producing companies of this country are understood to have cleared \$40,000,000 over and above all expenses in 1900. Considering the vastness of the profits, it is not surprising that the metal should be eagerly sought in all parts of the world.

Notwithstanding the enormous consumption of copper and the rapid expansion of its uses, there is no reason to fear that there will not be plenty of it to meet the wants of mankind in the future. Cheap methods of treating ore have brought such immense quantities of it within economical reach that the available supply of the metal can never approach exhaustion.—Washington Post.

When you are bilious, use those famous little pills known as DeWitt's Little Early Risers to cleanse the liver and bowels. They never gripe. Globe Drug Store, Roberts & Peterson.

Wood for Sale.

Leave orders at the Globe Commercial company for juniper, oak and pine wood. Delivered in any part of the city at the lowest market price.

Word comes from Payson that no mail has been received at that place from the Verde since the 16th, and that Pine and Strawberry have had no mail either way since that time, the mail from Payson only going to Arizona, about seven miles on the road to Pine. All the Payson mail, which should go via Verde, is being sent through Globe. There are several reasons assigned for the cause of this condition of things, but they don't get the mail to the people. The attention of the contractor has been called to this matter.

Headache often results from a disordered condition of the stomach and constipation of the bowels. A dose or two of Chamberlain's Stomach and Liver Tablets will correct these disorders and cure the headache. Sold by H. C. Hitchcock.

A recent letter from Yuma stated that a tramp was arrested a few days since and placed in the jail. The next morning it was discovered that he was broken out with small pox, and on the same day a constable visited an Indian camp near town, where he found a number of sick Indians. He notified a doctor who examined the sick ones, finding them all to have that disease. Although the people are somewhat uneasy about this discovery, they do not think there is any danger of its spreading while everything is being done to prevent it.

A Widow's Love Affair

Receives a setback, if she has offensive breath through constipation, biliousness or stomach trouble, but Dr. King's New Life Pills always cure those troubles; clean the system, sweeten the breath, banish headache; best in the world for liver, kidneys and bowels. Only 25c at Globe drug store.

The Native American, the bright little paper published at the Phoenix Indian school, refers to a poetical conceit shared in by the Indians on the San Carlos reservation. There is some reason to believe that the conservatives have not entirely forgiven the advent of the railroad into their domain. For reason, probably, they refer to the track as the "Gila Monster" and speaking of a certain place about two miles north of San Carlos, where the cliffs rise sheer above the track nearly a hundred feet high, they say: "Some day the rocks will fall down and crush the 'Gila Monster.' We are afraid the conservatives may be compelled to wait many days before this occurs."

Mrs. C. E. VanDusen, of Kilbourn, Wis., was afflicted with stomach trouble and constipation for a long time. She says, "I have tried many preparations but none have done me the good that Chamberlain's Stomach and Liver Tablets have." These tablets are for sale at Hitchcock's drug store. Price, 15 cents, samples free.

ARIZONA MINES.

Items About the Mines and Mineral Developments of the Territory, Culled From Exchanges.

The new pumping plant for the Arizona Copper company's works, was started on its regular run Tuesday last, and worked like a charm. It consists of a gasoline engine and three Stilwell-Biere centrifugal pumps, one throwing 800 and the other 400 gallons each per minute. The pump is designed to supply the entire plant with water, and takes the place of several other pumps, heretofore in operation in various parts of the works. The pump is located at the new well, which it is expected will furnish clear water when the river is muddy. At the present time the supply comes from the river. The new plant was put in place by Otto Rosenthal. Dick Kain is the day engineer.—Copper Era.

A Cripple Creek, Colo., telegram says that Senator E. O. Wolcott has struck the greatest ore body known in Colorado history. The strike was made some few days ago and was discredited, but it now proves that the chute in his mine, the Last Dollar, is fourteen feet between the walls, instead of five feet, as reported, and has been followed to the north, fifty-six feet. The rich ore runs from one foot to eighteen inches. The foot wall is granite and the hanging wall phonolite, which for fifteen inches carries a value of from one and a half to three ounces. The lowest average of twenty-six sacks taken from various portions went 886 ounces, or \$17,720 a ton. From this the values run to \$30,000.

A big gold strike is reported in the Eureka district a few miles from Kingman. A miner by the name of Pete Sorenson has been prospecting for years in this vicinity in hopes of finding the great ledge which furnished hundreds of thousands of dollars from the placer gulch in that district in former years, and with his partner, whose name is William Dunlap, last week was rewarded for his patient toil of years and outlay of every dollar he had or could get hold of, by the finding of a four-foot ledge containing a four-inch streak assaying by horn spoon test easily \$500 in gold to the ton. This ledge crosses Placer gulch about 240 rods above where the greatest deposits of gold were found.—Special correspondence of The Republican.

Morenci will soon rival any mining town in Arizona, both in population and mineral output. The mines promise to feed the reduction works with increasing quantities of ore until the present generation of mankind shall have passed away. The place has scarcely a resemblance of what it was four years ago when Phelps, Dodge & Co. purchased the interest of Wm. Church in the Detroit Copper company and installed Mr. C. E. Mills as general superintendent. Since then the work of creating a new Morenci has been going steadily on and promises to continue. Mr. Mills never loses sight of the welfare of his employees and will in a short time show a model camp, both for industry and good order.—Bulletin.

At Hermosillo, Friday last, the Oasis man was shown a new gold washing machine which was en route to the Yaqui river, near Matape, to be tested upon the auriferous earth along the banks and in the bed of that stream, and at other points in that vicinity. The machine consists of a large water-tight box, upon wheels. Within the box revolves a pan about three feet in diameter, with a trough-like rim around the circumference. The pan has a flat, smooth surface, a hollow inverted cone, the lower end bolted to a collar, to which is also bolted the true bottom, and the collar is bolted to a perpendicular shaft which imparts the motion to the apparatus. The power being applied to the upper part of the shaft by a belt from a portable steam engine, which is a part of the outfit. By a mechanical arrangement at the upper end of the shaft the pan can be raised and lowered while in operation.—Nogales Oasis.

The Bisbee correspondent of the Tombstone Prospector says: John Payne, an old time mining man in Mexico was in town for a few hours from Naco to see parties about a gold strike he has made on the southern part of the Sonora river. He has in his possession a fine piece of quartz containing wire gold. He refused to give any particulars, but said he certainly had a very fine property.

It is reported on good authority that recently there has been discovered about seven or eight miles north of Placerville, in the Montezuma district, a big ledge of gold and silver rock, which it will pay to work the entire width, and it carries a two-foot streak of ore which gives assays of one thousand ounces in silver and ninety ounces in gold per ton. Messrs. Gilego & Diaz are the lucky discoverers of the property.—Los Angeles Herald.

Reports from Oro Blanco convey the intelligence that the owners of the Helvetia copper property in Pima county are investing in the Oro Blanco region. Doctor Lenox of the Helvetia

company, was over there and secured options upon some thirty-five claims, including the Tres Amigos mine and a number of adjoining properties. It is announced that the new owners will immediately begin vigorously the prosecution of development work upon an extensive scale.—Arizona correspondent in Los Angeles Herald.

The Williams News says another discovery was added to the long list in the canyon district a few days ago. A couple of prospectors came in this week and claim to have located a large deposit of tin or metal resembling it. They located several claims and came in to make arrangements for further examination and working.

Wednesday evening Mr. W. M. Hoey, collector of customs at Nogales, returned from a trip to Douglas and Naco. He reports that in anticipation of the diversion to that place of traffic into and out from the Nacozari region there is considerable life at Douglas. The two rival townships have been merged and a good town is anticipated. The railroad company is erecting a suitable building to rent to the government for a custom house, and the Montezuma Copper company is erecting a fine store and warehouse buildings. Prof. Douglas will erect a fine library building and reading room upon a site donated for the purpose.—Oasis.

Thomas E. Davey, an English mining engineer, who has been examining copper mines of Arizona, gave this as his opinion of the mineral resources of the great west: "I have visited nearly all the mining countries of the world," said he, "but the opportunities of the Rocky mountains are excellent nowhere else on the face of the globe. Many of the districts of the southwest need branch railways leading from the great roads, but the time has come when the large corporations will build branches if the mining outlook in the district will warrant it. There is surely going to be vast development not only in Arizona, but in all the mining states of the mountains."—San Francisco Mining & Engineering Review.

Paints, oils, cigars, tobaccos, at Globe Drug Store.

Sunset Limited.—Season 1900-1901.

Three times a week. First date from San Francisco is Wednesday Nov. 7, from New Orleans, Thursday Nov. 18.

Notice to Water Consumers.

Water rents will be due on the first of each month and are payable at the office of Chas. T. Martin in the court house. THE PINAL MOUNTAIN WATER CO.

Just received, a select line of genuine hand carved, ladies' and gentlemen's leather belts and hat bands, at the News Depot.

Residence phone, "No. 60," Globe Drug Store.

BUSINESS POINTERS.

The finest baths in town at Towle's barber shop.

A new assortment of pipes at G. S. Van Wageningen's.

Blue Grass whisky, 13 years old, at G. S. Van Wageningen's.

Home made candles, creams and taffies, at the Kandy Kitchen.

Dr. Preston, resident dentist—in the new Hitchcock building.

C. E. Taylor is the sole agent in Globe for Cyrus Noble whisky.

You can find almost any domestic or imported bottle goods at Cafe Royal.

Quinine Sherry is a fine remedy for typhoid and malaria. At Cafe Royal.

For anything in the line of wines and liquors call at G. S. Van Wageningen's.

For fine Geneva Holland gin (double stamped goods) there is nothing better than that to keep the kidneys in order. At Cafe Royal.

Wall paper from cheap prints to the most gilt, embossed and ingrain. The only place in town where you can get the celebrated Renown 5c cigar, also all the leading brands of cigars from 5c up to 50c each. The News Depot.

The Kentucky Liquor Store handles straight Kentucky whiskey, bottled goods a specialty. Family trade solicited, goods delivered. Telephone No. 13. J. T. Broyles, proprietor.

Kodol
Dyspepsia Cure
Digests what you eat.

This preparation contains all of the digestants and digests all kinds of food. It gives instant relief and never fails to cure. It allows you to eat all the food you want. The most sensitive stomachs can take it. By its use many thousands of dyspeptics have been cured after everything else failed. It is unequalled for all stomach troubles.

It can't help but do you good

Prepared only by E. C. DeWitt & Co., Chicago. The 5c bottle contains 2 1/2 times the 10c size. Globe Drug Store, Roberts & Peterson.

J. H. BAKER.
P. O. Livingston, Gila county, Arizona.
Range in Sierra Ancha, and on Upper Salt river.

Also owns cattle branded on right hip.

I offer \$200 reward for the conviction of any one driving stock from the range or changing of defacing brands.

Arizona & New Mexico Ry.

Passenger trains: mountain time.
Train 1 leaves Clifton daily at 8:00 a. m.; arrives Lordsburg 12:05 p. m.
No. 5 leaves Clifton daily at 2 p. m.; arrives Lordsburg 6:15 p. m.

No. 6 leaves Lordsburg at 7 a. m.; arrives Clifton 11:20 a. m.
No. 2 leaves Lordsburg at 3 p. m.; arrives Clifton 7:05 p. m.
Distance from Clifton to Lordsburg 71 miles.

PASSENGER RATES.
Clifton to—North Siding, 30c; South Siding, 40c; Guthrie, 70c; Coronado, 85c; Shelden, \$1.45; Donnan, \$1.95; Thompson, \$2.45; Summit, \$3.10; Vetch, \$3.60; Lordsburg, \$4.25.
Children under 10, half price. Excess baggage 1c per 100 pounds per mile. 150 lbs baggage carried free with each full ticket; 75 lbs free with each half ticket. Passengers from ticket stations paying on trains will be charged 25c extra.

JAS. COLCHON, Sup't.
H. J. SIMMONS, Pres't.

TIME TABLE PACIFIC STANDARD

(20th Meridian.)

SOUTHERN PACIFIC COMPANY
IN EFFECT OCTOBER 29, 1899.

EASTBOUND	STATION	WESTBOUND
5:30 PM	San Francisco	Ar 8:45 PM
1:20 PM	Los Angeles	Ar 12:30 PM
2:00 PM	Los Angeles	Ar 12:00 PM
10:32 PM	Yuma	Ar 2:50 AM
3:02 AM	Maricopa	Ar 9:35 AM
6:45 AM	Tucson	Ar 7:20 PM
7:05 AM	Tucson	Ar 7:00 PM
9:05 AM	Benson	Ar 4:57 PM
10:42 AM	Willcox	Ar 3:04 PM
11:35 AM	Bowie	Ar 2:18 PM
11:55 AM	Bowie	Ar 1:58 PM
1:45 PM	Lordsburg	Ar 12:15 PM
3:30 PM	Deming	Ar 10:15 AM
6:00 PM	El Paso	Ar 7:20 AM
8:20 PM	El Paso	Ar 5:40 AM
7:30 PM	San Antonio	Ar 9:00 AM
8:00 PM	San Antonio	Ar 8:30 AM
10:45 AM	Flintston	Ar 5:30 AM
3:35 AM	Houston	Ar 11:15 PM
4:00 AM	Houston	Ar 10:50 PM
6:25 PM	New Orleans	Ar 8:50 AM

*Central time east of El Paso, two hours faster than Pacific time.

W. H. GOODMAN, G. F. & T. Agent, San Francisco.
T. H. Dresser, Local Freight and Ticket Agent, Bowie, Arizona.
T. E. Hunt, Commercial Agent, El Paso, Texas.

There is Something to See ALONG THE

FRISCO LINE
THE SHORT AND ONLY SCENIC ROUTE TO THE

Missouri and Mississippi Rivers and Beyond
A FIRST CLASS LINE TO

Texas and Old Mexico
CAFÉ CAR AND RAILROAD RESTAURANT SERVICE UNEXCELLED IN AMERICA.

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EDWARD WECK.

Insurance and Real Estate Agent,

Policies carefully written.

LOSSES Promptly Adjusted

And paid in my office, Globe, Arizona.

GILA VALLEY, GLOBE & NORTHERN R.R.

Time Table No. 26, taking effect 12:01 a. m., Jan. 30, 1901. Pacific (120 mer.) Time.

Second class train No. 15 leaves Globe on Mondays, Wednesdays and Fridays only.

First class train No. 11 leaves Globe Daily except Sunday.

Toward Globe first class train No. 12 daily except Sunday.

Second class train No. 16 leaves Bowie on Tuesdays, Thursdays and Saturdays only.

An extra consisting of a straight passenger train will be run both ways each Sunday on the time of Nos. 11 and 12.

No. 15 NO. 11 MILE STATIONS No. 1 NO. 16

Leave	Arrive	Leave	Arrive
7:00 a.m.	5:00 p.m.	7:00 a.m.	5:00 p.m.
7:35 a.m.	5:25 p.m.	7:35 a.m.	5:25 p.m.
8:10 a.m.	5:50 p.m.	8:10 a.m.	5:50 p.m.
8:52 a.m.	6:32 p.m.	8:52 a.m.	6:32 p.m.
9:35 a.m.	7:05 p.m.	9:35 a.m.	7:05 p.m.
10:00 a.m.	7:30 p.m.	10:00 a.m.	7:30 p.m.
10:32 a.m.	7:52 p.m.	10:32 a.m.	7:52 p.m.
11:47 a.m.	8:58 p.m.	11:47 a.m.	8:58 p.m.
12:12 p.m.	9:16 p.m.	12:12 p.m.	9:16 p.m.
12:30 p.m.	9:35 p.m.	12:30 p.m.	9:35 p.m.
1:14 p.m.	10:14 p.m.	1:14 p.m.	10:14 p.m.
3:05 p.m.	11:25 p.m.	3:05 p.m.	11:25 p.m.

All regular trains are classified on the time table with regard to their priority of right to the track, trains of the first class being superior to those of the second and all succeeding classes.

All southbound trains have absolute right of track over all northbound trains of the same or inferior class.

Trains Nos. 11 and 12 make connections at Bowie with Southern Pacific trains 19 and 20 for an points East and West, and with stage lines at Globe to Payson, Upper Salt River Valley, Tonto Basin, Riverside and the Ray mines.

Telegraph stations 5. Flag stations, no agent.

All trains carry passengers.

W. H. GARLAND, President.
A. M. REAL Superintendent.

M. & P. & S. R. V. Railroad

PHOENIX SHORT LINE.

MARICOPA DIVISION

No. 1	Dist	STATIONS	No. 2
5:30 p.m.	14	Phoenix ar 6:15 a.m.	
6:00	7	Tempe ar 6:50	
6:15	10	Peterson ar 7:05	
6:30	16	Kyle ar 7:20	
6:42	22	Alicia ar 7:30	
6:55	26	Sacaton ar 7:45	